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DIRECT CONNECTION MANIFOLD FOR RECIPROCATING PISTON PUMPTECHNICAL FIELD

This application claims the benefit of US Application serial number 60/369,950,
5 filed April 5, 2002.

BACKGROUND ART

Airless sprayers which utilize reciprocating piston pumps have proven popular for applying paints, coatings and various texture materials. Such sprayers have typically 10 utilized a hose running from the pump cylinder to a remote manifold which incorporates a dump valve and a pressure sensor for pressure control.

DISCLOSURE OF THE INVENTION

It is advantageous, particularly when spraying texture materials and/or utilizing 15 long lengths of hose, to minimize the amount of pressure drop from the outlet of the pump to the application device (such as a spray gun). Toward that end, the instant invention uses a block fluid manifold attached directly to the pump cylinder and which includes provisions for a pressure sensor, a dump or safety valve and a hose outlet.

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These and other objects and advantages of the invention will appear more fully from the following description made in conjunction with the accompanying drawings wherein like reference characters refer to the same or similar parts throughout the several views.

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BRIEF DESCRIPTION OF DRAWINGS

Figure 1 shows the instant invention in a partially exploded view.

Figure 2 shows the instant invention in an assembled view.

10 BEST MODE FOR CARRYING OUT THE INVENTION

The instant invention, generally designated 10, is shown partially exploded in Figure 1, is comprised of a reciprocating piston pump 12 having a pump cylinder 14. Cylinder 14 is provided with a flat mounting surface 14a, attachment holes 14b and outlet passage 14c which outputs the pressurized fluid from within pump 12. Fluid manifold 16 is desirably formed from a single block of material such as stainless steel and is fastened to cylinder 14 by fastener bolts 22. A safety valve/dump valve 18 (of known construction) and pressure sensor 20 are attached via threading or other conventional attachment mechanisms to manifold 16.

It is contemplated that various changes and modifications may be made to the 20 manifold-pump assembly without departing from the spirit and scope of the invention as defined by the following claims.